# Research Networking Activities in Support of Sustained Coordinated Observations of Arctic Change

*A white paper drawing on the Sustaining Arctic Observing Networks (SAON) Roadmap Process and Arctic Observing Summit Working Group deliberations*

Hajo Eicken, Sandy Starkweather, Henry W. Loescher, Raychelle Daniel, Peter Pulsifer, Matt Jones, Amber Budden, Will Ambrose, Alice Bradley, Craig Lee, An Nguyen, Patrick Heimbach, Cecilia Bitz, Craig Tweedie, Bill Manley

Comments & feedback to

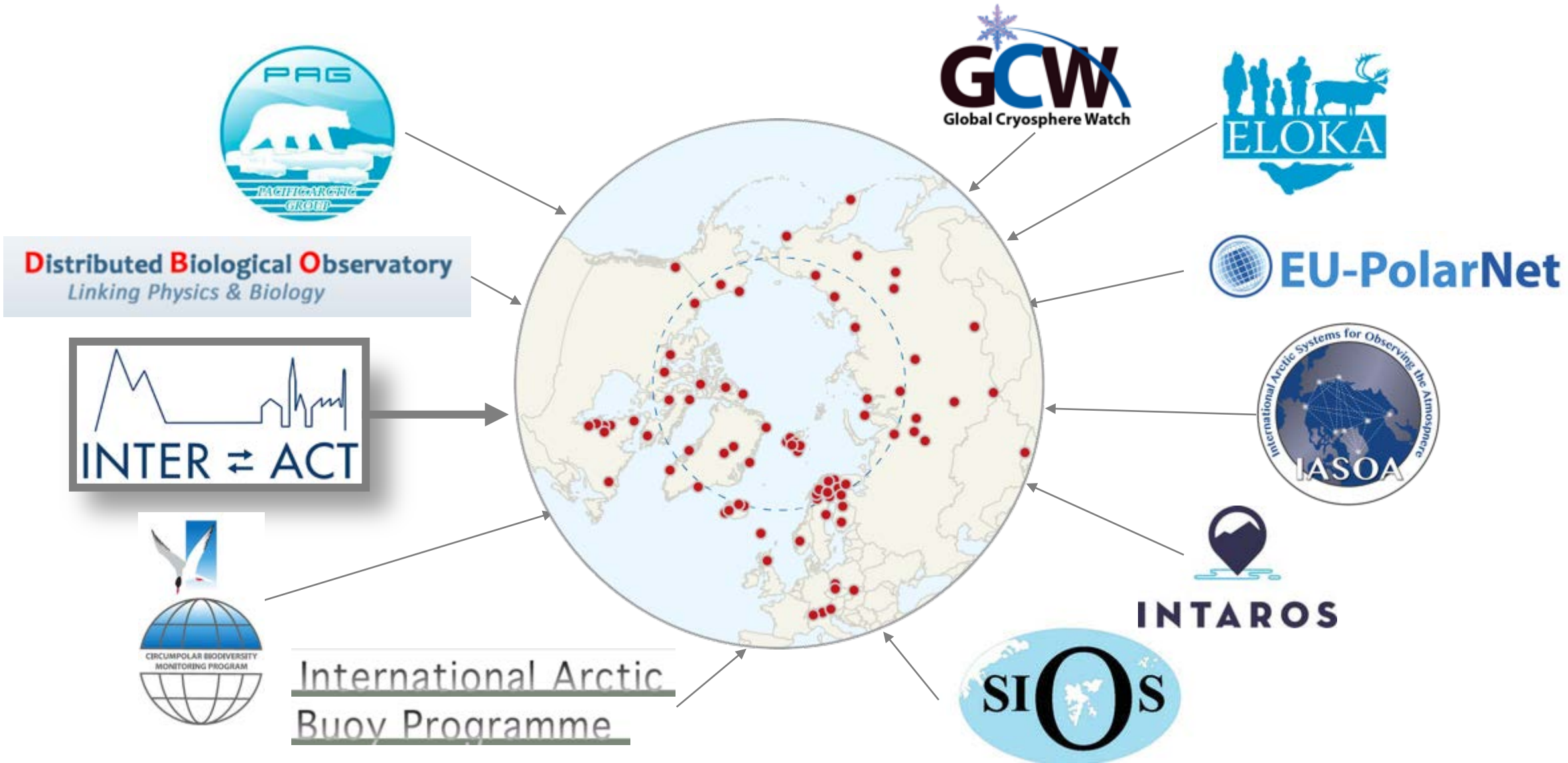
Hajo Eicken – heicken@alaska.edu

Sandy Starkweather – sandy.starkweather@noaa.gov

SAON
SUSTAINING ARCTIC OBSERVING NETWORKS

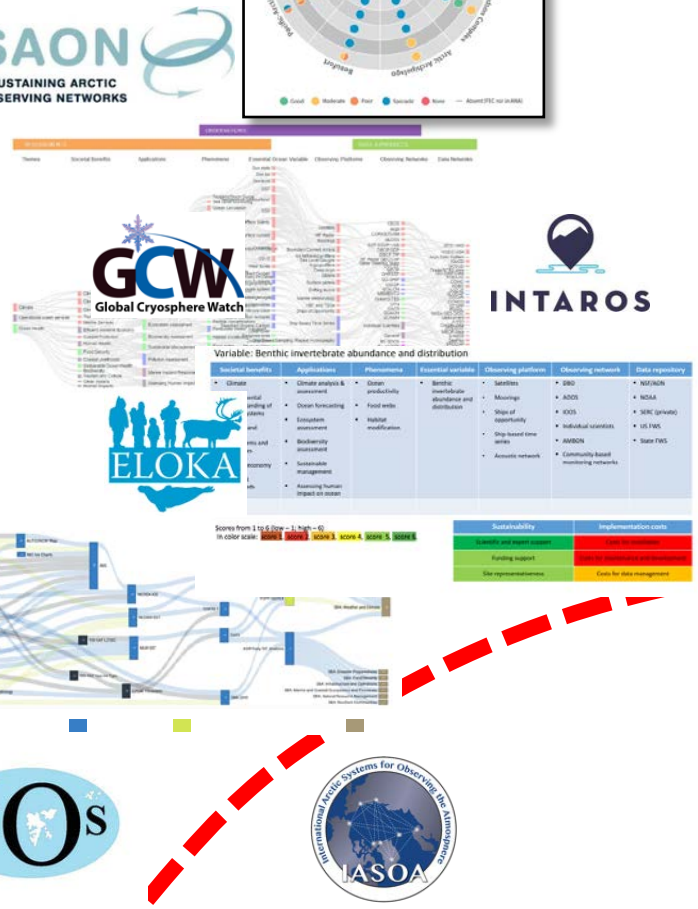
- Sustained Arctic observations provide shared benefits to Arctic & non-Arctic countries
- Collaborative approaches to sustained observations require processes and capacity to support convergence towards a common observing framework
- SAON has emerged as the de facto governance body under IASC and Arctic Council to provide an inclusive environment within which to establish such a framework
- SAON's vision is for a connected, collaborative, and comprehensive long-term pan- Arctic Observing System that serves societal needs.
- How do we move from a vision to specific action?

# SAON needs a common (Road) Map



# Achieving SAON/ASM/AOS goals

Broad range of themes, interests, mandates, concepts, champions




SAON
SUSTAINING ARCTIC OBSERVING NETWORKS

2nd ARCTIC SCIENCE MINISTERIAL

ARCTIC OBSERVING SUMMIT
AOS

**Assessment ("Knowledge map")** → **Arctic Observing Roadmap**

- Parsing & synthesis
- Ranking
- Linking

- Well-defined requirements for EVs
- Societal benefits (shared)

- Co-design/imple-mentation/integration of observing system components

- Bundling of efforts insufficient → Development of coherent set of observations drawing on requirements guided by shared benefits
- Identify commonalities & link requirements & implementation across narrow efforts that fit into common thematic framework

# How do we get there?

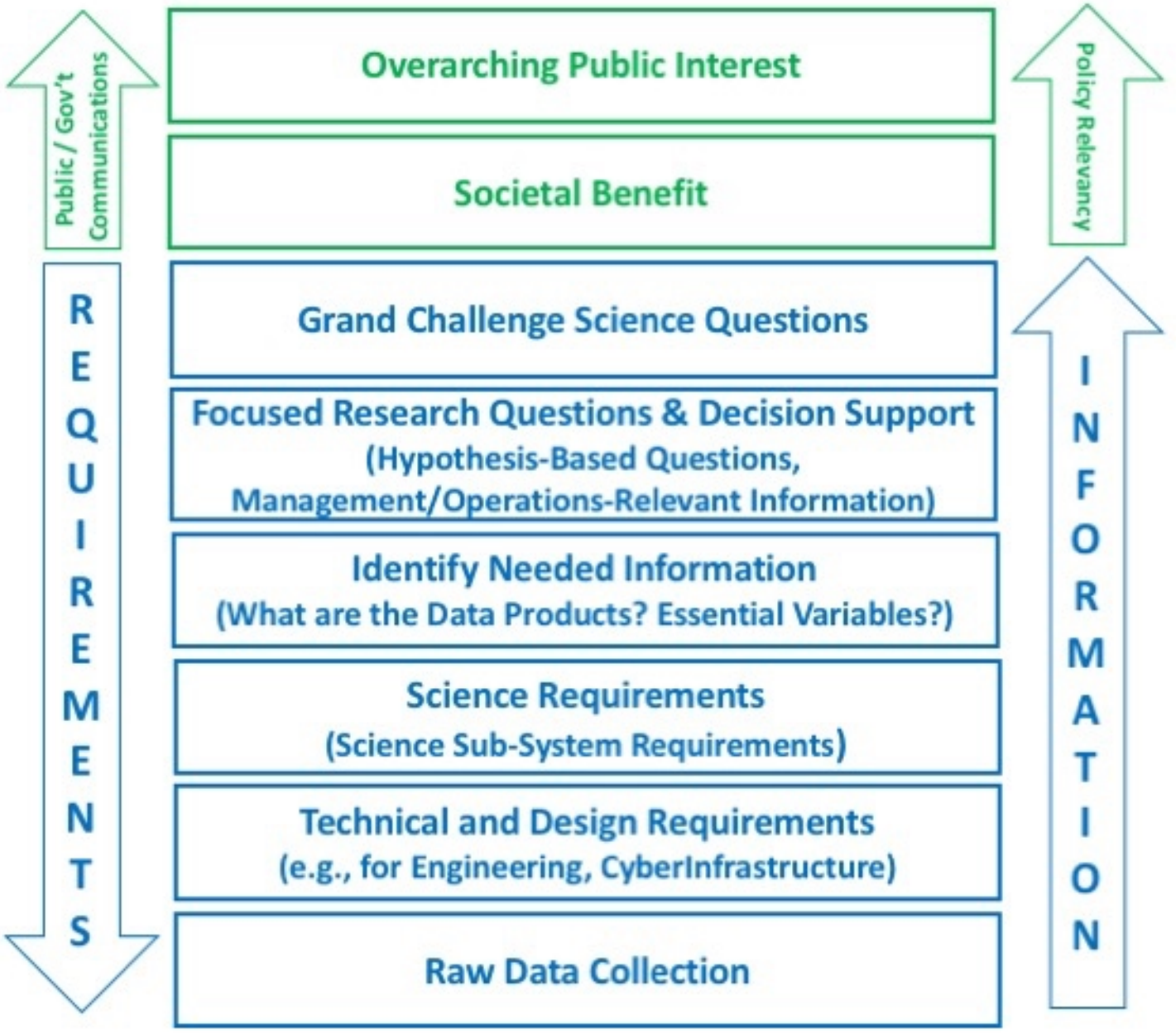
- Through networking and activities that support the coalescence of different observing initiatives by advancing

**(i) Coordination**

**(ii) Design Development**

**(iii) Information Infrastructure**

*Focus on Food Security as Mature Theme*



*Requirements*

**Coordination**
- Transition AOS from biennial meeting into process under SAON
- Support SAON Roadmap Task Team, CON, AOS WGs: Assessments & requirements
- Support AOS WGs
- Review progress at AOS
- International AOS Secretariat

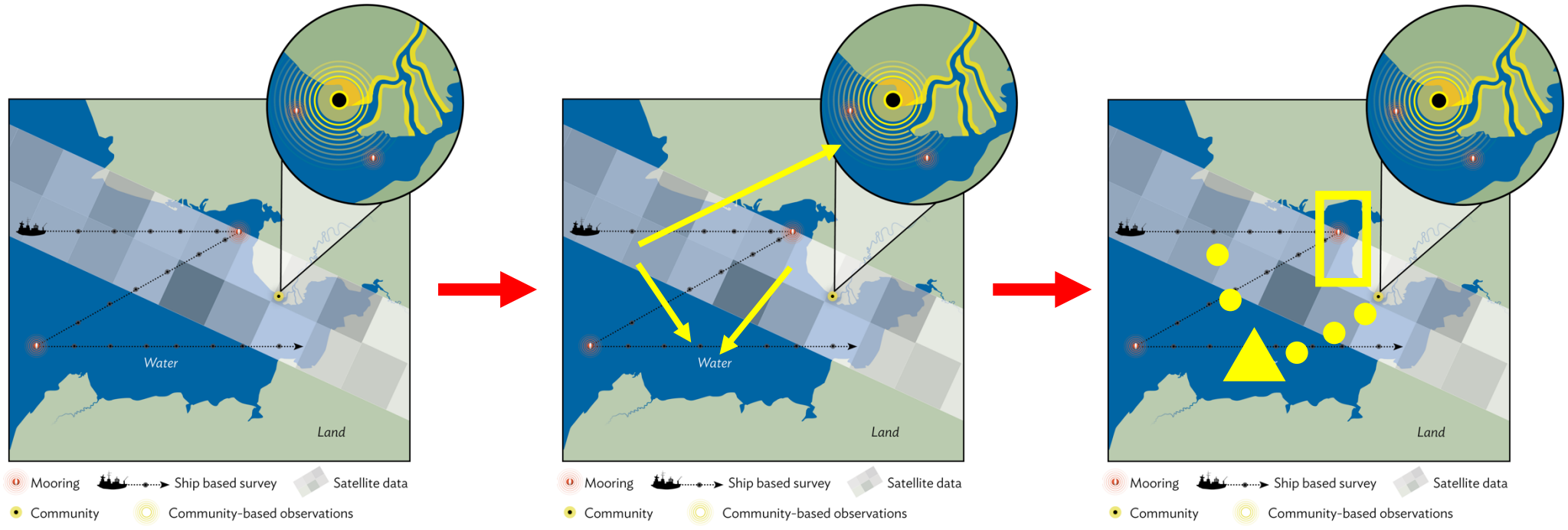
**Design Development**
- Observing system design & optimization: planning→strategy→tactics
- Focus on priority area: Coastal/marine food security
- Shared benefits within observing framework: Guidance from communities & OSSEs

**Information Infrastructure**
- Adapt, refine & optimize observing efforts
- Implement FAIR data management
- Develop use cases around food security theme
- Create information products for food security theme

*Existing assets & capabilities; requirements*

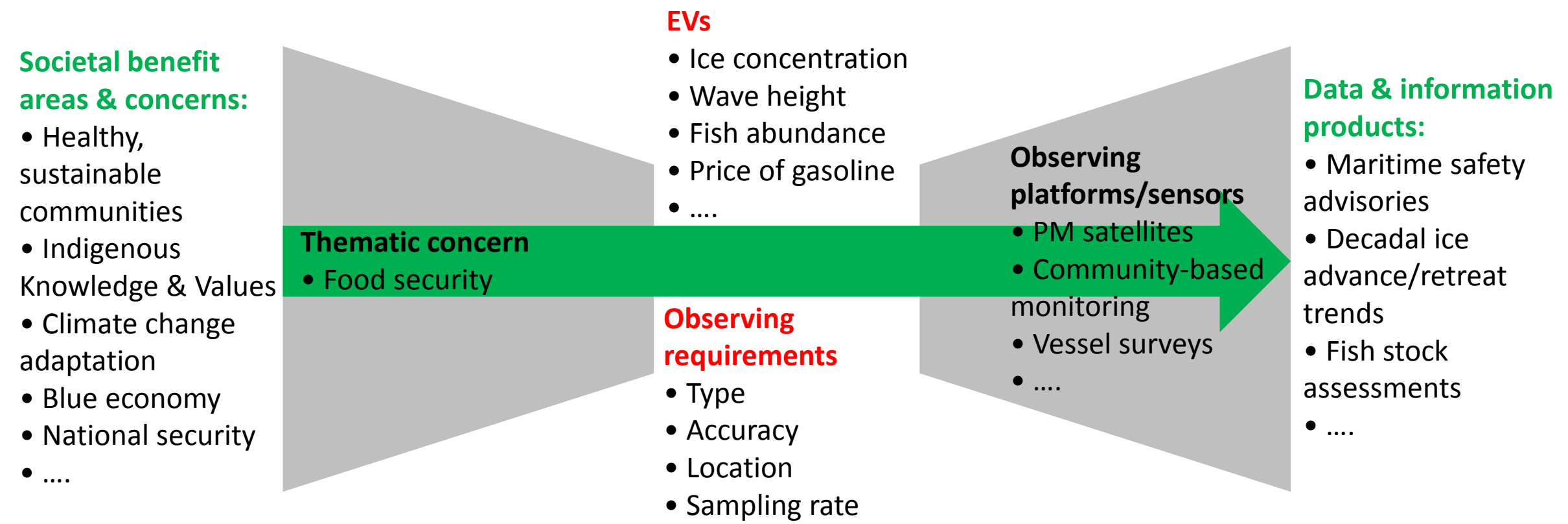
*Observing system; data & information products*

Arctic Observing Summit Process



# Essential Variables (EV) to guide coordination

**Coordination Task Team** | **Design Development Task Team** | **Information Infrastructure Task Team**



# Potential links to PAG/DBO – AOS 2020

- AOS 2020 in March 2020 in Akureyri, Iceland as opportunity to advance coordinated observing between international research community and Indigenous Peoples Organization priorities
- AOS Working Group on Indigenous Observing Needs and Community-Based Monitoring (Raychelle Aluaq Daniel et al.) - Focus on food security in Pacific Arctic sector for AOS 2020, drawing on ICC Alaska Food Security (2015) framework
- Workshop proposed following AOS2020 to jointly identify essential variables and initiate observing system design development framework
- Potential for PAG/DBO researchers to join task team associated with food security focused observations → Better links to coastal community interests & concerns for PAG community

Questions?